

REMARKS

1. In response to the Office Action mailed March 23, 2006, Applicants respectfully request reconsideration. Claims 1-32 were last presented for examination. In the outstanding Office Action, claims 1-8, 13-28 and 30-32 were rejected and claims 9-12 and 29 were objected to. By the foregoing Amendment, no claims have been amended, added, or canceled in this paper. Thus, upon entry of this paper, claims 1-32 will remain pending in this application. Of these thirty-two (32) claims, five (5) claims (claim 1, 22, 24, 31 and 32) are independent. Based on the above Amendments and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Art of Record

2. Applicants acknowledge receipt of form PTO-892 identifying additional references made of record by the Examiner.

Allowable Subject Matter

3. Applicants note with appreciation the Examiner's indication that claims 9-12 and would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims.

Claim Rejections

4. Independent claims 1, 22 and 24 and dependent claims 2-8, 13, 16, 25-27 and 30 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2003/0101020 A1 to Matsushige (hereinafter, "Matsushige") in view of U.S. Patent No. 6,000,040 to Cully, *et al.* (hereinafter, "Cully") and U.S. Patent No. 5,675,807 to Iswandhi, *et al.* (hereinafter, "Iswandhi"). In addition, independent claim 32 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Matsushige in view of Cully. Dependent claims 18-21 and 23 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Matsushige in view of Cully and Iswandhi as applied to claim 1 above, and further in view of U.S. Publication No. 2003/0101020 A1 to Hawkins, *et al.*

(hereinafter, "Hawkins"). Based upon the following Remarks, Applicants respectfully request reconsideration and withdrawal of these rejections.

5. As a preliminary matter, Applicants respectfully note that although claims 14-15, 17, and 31 were indicated as rejected on the cover page of the Office Action, the Examiner provided no reasons for rejecting these claims. As such, Applicants respectfully request that the Examiner either indicate their allowability or provide specific reasons for their rejection.

6. Independent claim 1 recites, in part, "a fault bypass module ... configured to intercept at least one signal indicative of one or more faults ... and mask the at least one signal indicative of one or more faults by generating at least one signal indicative of absence of the one or more faults." In rejecting claim 1, the Examiner recognized that the primary reference, Matsushige, fails to teach intercepting and masking fault signals. Instead, the Examiner relied on the combination of two separate and distinct references (i.e., Cully and Iswandhi) for allegedly disclosing "masking said intercepted at least one signal ... by generating signals indicative of absence of said faults, thereby masking said intercepted signal." (*See*, Office Action at pg. 3-4.)

7. The Examiner further recognized that both Cully and Matsushige fail to teach a "fault bypass module ... configured to mask ... at least one signal indicative of one or more faults by generating at least one signal indicative of [the] absence of the one or more faults." Instead, the Examiner relied on Iswandhi for allegedly disclosing this limitation. (*See*, Office Action at 4.) Applicants respectfully submit the Examiner's reliance on Iswandhi is misplaced.

8. Iswandhi is directed to a system and network that provides connectivity for interprocessor and input/output communications. (*See*, Iswandhi at col. 1 lns. 17-20.) In rejecting claim 1, the Examiner relied on col. 2 ln. 67 – col. 3 ln. 6 of Iswandhi as allegedly disclosing a fault bypass module generating at least one signal indicate of absence of the one or more faults. (*See*, Office Action at 4.) This relied on portion of Iswandhi discloses processors periodically broadcasting an "I'm Alive" message for receipt by other processors of the system so that each processor knows which processors are functioning. (*See*, Iswandhi at col. 2 lns. 62-66.) When a processor fails, that failure is announced and identified by the absence of the processors "I'm Alive" message. (*See*, Iswandhi at col. 2

In. 66-col. 20.) In response to detecting this failure, the operating system directs a backup process to begin execution from a previous checkpoint. (*See, Iswandhi at col. 3 Ins. 2-4.*) Additionally, new backup processes may be started in other processors. (*See, Iswandhi at col. 3 Ins. 4-5.*)

9. Thus, this relied on portion of Iswandhi merely discloses the execution of backup processes in the event a processor fails. It, however, fails to teach or suggest masking a signal indicative of one or more faults by generating at least one signal indicative of absence of the one or more faults.

10. If the Examiner is alleging that the execution of the backup process discloses masking a signal by generating a signal indicative of at least one signal indicative of the absence of one or more faults, Applicants disagree. The mere execution of these backup processes in no way masks a fault signal. Further, Iswandhi discloses the opposite of a fault message being generated by the processor that even could be masked. Rather, Iswandhi discloses that a fault is detected by recognizing the absence of an “I’m Alive” message.

11. As such, contrary to the Examiner’s assertion, this relied on portion of Iswandhi fails to teach or suggest “fault bypass module … configured to … mask the at least one signal indicative of one or more faults by generating at least one signal indicative of absence of the one or more faults,” as recited by claim 1.

12. Moreover, in rejecting claim 1, the Examiner also cited to col. 32 lines 45-53 of Iswandhi as allegedly disclosing masking at least one signal indicative of one or more faults. (*See, Office Action at 4.*) This portion of Iswandhi, however, is unrelated to the above-discussed portion of Iswandhi and the Examiner has provided no explanation regarding any alleged relationship. Particularly, the above-discussed portion of Iswandhi (i.e., col. 2 ln. 67 – col. 3 ln. 6) appears in the Background section of Iswandhi, and accordingly is discussing the prior art. This second portion of Iswandhi (i.e., col. 32 Ins. 45-53) appears in the Detailed Description of Iswandhi and discusses a mask register 175 and mask check 177 of the present invention. Unsurprisingly, this mask register 175 and mask check 177 are not discussed to the portion of the Background of the Invention relied on by the Examiner.

13. Rather, the Examiner is using impermissible hindsight to pick and choose unrelated

portions of the prior art in rejecting claim 1. As such, Applicants respectfully request that the Examiner reconsider and withdraw the rejection to claim 1 for at least the reason that none of the cited references whether taken alone or in combination teach or suggest “fault bypass module . . . configured to . . . mask the at least one signal indicative of one or more faults by generating at least one signal indicative of absence of the one or more faults,” as recited by claim 1.

14. Applicants further respectfully submit that independent claims 22, 24, and 31, which include similar recitations to the above-discussed recitations of claim 1 are likewise allowable for at least similar reasons to those discussed above.

15. Applicants further respectfully request that the Examiner reconsider and withdraw the rejection of independent claim 32 for at least the following reasons. Independent claim 32 recites, in part, “a fault bypass module incorporated in said computer server, said fault bypass module configured to mask signals indicative of one or more faults associated with one or more of said components during margin testing of said computer server.” In rejecting claim 32, the Examiner recognized that Matsushige, the primary reference, fails to teach this limitation. Instead, the Examiner relied on Cully as allegedly teaching this limitation. Applicants respectfully disagree.

16. Cully is directed to diagnosing fault states in a computer system. In rejecting claim 32, the Examiner relied on col. 1 ln. 52 through col. 2 ln. 18 of Cully as allegedly curing the above-noted defect of Matsushige. This relied on portion of Cully discloses fault detectors that provide indications to a central manager that indicate faulty operation of a particular circuit. (*See*, Cully at col. 1 lns. 62-64.) These indications include interrupt signals transmitted between the fault detectors and the central manager. (*See*, Cully at col. 1 lns. 64-66.) This permits the computer to be able to automatically identify circuits causing faulty operations. (*See*, Cully at col. 2 lns. 8-9.) This information can be provided to a service provider so that they can quickly perform any necessary maintenance to fix the computer system. (*See*, Cully at col. 2 lns. 10-14.) Cully, however, does not disclose masking these fault signals. Rather, as noted above, Cully merely discloses receiving the fault signals and providing them to a service provider for repair and maintenance purposes.

17. As such, Applicants respectfully submit that Cully fails to teach or suggest “a fault bypass module incorporated in said computer server, said fault bypass module configured

to mask signals indicative of one or more faults associated with one or more of said components during margin testing of said computer server,” as recited by independent claim 32. Applicants accordingly respectfully request that the Examiner reconsider and withdraw the rejection to claim 32.

The Examiner has Failed to Provide Evidence of a Motivation to Combine

18. The §103 rejections are *prima facie* improper because they provide no appropriate basis for combining Matsushige and NEC. As set forth in the Manual of Patent Examining Procedure (MPEP) at § 706.02(j), “To establish a *prima facie* case of obviousness . . . there must be some suggestion or motivation, *either in the references themselves or in the knowledge generally available to one of ordinary skill in the art*, to modify the reference or to combine reference teachings (emphasis added) . . . The teaching or suggestion to make the claimed combination and the reasonable expectation of success *must both be found in the prior art and not based on applicant’s disclosure* (emphasis added). *In re Vaeck*, 947 F.2d. 488, 20 USPQ2d 1438 (Fed. Cir. 1991).”

19. The Office Action attempts to justify combining Matsushige with Culley and with Iswandhi based on the following conclusory statement:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a fault bypass module to mask the at least one signal indicative of one or more fault by generating at least one signal indicative of absence of the one or more faults as taught by Iswandhi et al. in a margin test method of Matsuhige in view of Cully et al. for the purpose of providing a fault-tolerant operation through both “fail-fast” and fail-functional” operation. Fail fast operation is achieved by locating error-checking capability at strategic points of the system (Iswandhi et al., col. 5 lines 8-12). (See, Office Action at pg. 4).

20. This section cited by the Examiner, however, is merely related to a particular disclosure of Iswandhi regarding using an error checking capability. This section entirely fails to provide any motivation, and the Examiner has failed to explain any reason, whatsoever for why one of skill in the art might be motivated to combine Iswandhi and Matsushige in the manner claimed.

21. As held by the Federal Circuit in *In re Lee*, 61 USPQ2d 1430, 1433 (Fed. Cir.

2002), specific reasons must be shown in the art suggesting a combination of references. (See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“[P]articular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.”); *Also see, In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) (“[E]ven when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination.”)).

22. Thus, in order to provide a *prima facie* case of obviousness, the Examiner must provide specific reasons why someone might want to combine Matsushige and Iswandhi in the manner claimed. This cited section of Iswandhi, however, is entirely unrelated to Matsushige and the Examiner has provided no explanation nor citations to the prior art showing why someone might want to achieve the fail-fast operation of Iswandhi in the system of Matsushige. Moreover, even assuming such a motivation exists to use fail-fast operation in the system of Matsushige, the Examiner has not explained why someone might be motivated to combine Matsushige with the specific portions of Iswandhi relied on by the Examiner in rejecting claim 1.

23. As such, because the Examiner has failed to provide evidence of a motivation to combine Iswandhi and Matsushige, Applicants respectfully request that the Examiner reconsider and withdraw the rejections under §103 of claims 1-8, 13, 16, 18-27, 30 for at least this additional reason

24. Moreover, in addition to providing evidence in the prior art of a motivation to combine Iswandhi and Matsushige, the Examiner must also provide evidence of a motivation to combine Iswandhi with Culley. The Examiner has, however, failed to explain any reason whatsoever of an alleged motivation for combining Iswandhi and Cully. Rather, the only citation provided by the Examiner for alleging a motivation to combine is the above-discussed portion of Iswandhi disclosing a fail-fast operation. However, even assuming that this portion provides a motivation for combining Matsushige and Iswandhi (which as noted above it does not), the Examiner has failed to also provide evidence of a proper motivation to combine Iswandhi and Culley.

25. As such, Applicants respectfully request that the Examiner reconsider and withdraw

the rejections under §103 of claims 1-8, 13, 16, 18-27, 30 for at least this additional reason that the Examiner has failed to provide evidence of a motivation to combine Iswandhi and Culley.

26. Likewise, the Examiner has failed to provide evidence of a proper motivation to combine Cully and Matsushige in rejecting independent claim 32. Particularly, the only explanation provided to the Examiner for combining Cully and Matsushige is for combining the references “for the purpose of providing an apparatus and method for managing faults in a computer system having circuits.” (*See*, Office Action at 7.) Thus, the Examiner appears to be relying on the disclosure of “circuits” in Cully as allegedly providing a motivation to combine the references. This is entirely improper. As noted above, the Examiner must provide evidence of a motivation to combine the references in the manner claimed. The mere disclosure of circuits by Culley, however, provides no motivation whatsoever to include “a fault bypass module” as claimed in the system of Matsushige. As such, Applicants respectfully submit that the Examiner has failed to provide evidence of a proper motivation for combining Matsushige and Culley. Applicants therefore respectfully request that the Examiner reconsider and withdraw the rejection under §103 of claim 32 for at least this additional reason.

Failure to Comply with 27 C.F.R. §1.104(c)(2)

27. Applicants further respectfully submit that the §103 rejections are improper because the Examiner has failed to comply with the requirements of 37 C.F.R. § 1.104(c)(2):

In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.

28. Contrary to the requirements of 37 C.F.R. § 1.104(c)(2), no attempt has been made in the Office Action to clearly explain the pertinence of the references for each rejected claim. For example, in rejecting claim 1, the Examiner’s sole explanation for relying on Iswandhi is citations to disjointed portions of the reference. No attempt has been made by

the Examiner to explain why the Examiner believes these disjointed portions are both directed to the same thing. That is, the Examiner has made no attempt to explain why the Examiner believes the portion of Iswandhi in the Background section of the reference (i.e., col. 2 ln. 67 – col. 3 ln. 6) discloses a signal that masks a signal disclosed much later in the application (i.e., in col. 32 lns 45-53 of Iswandhi). This mere citation to disjointed portions provides no explanation regarding their pertinence, and accordingly falls far short of the requirement under 37 C.F.R. §1.104(c)(2) that the Examiner must clearly explain the pertinence of the reference for each rejected claim. As such, Applicants respectfully request that the Examiner reconsider and withdraw the rejections for at least this additional reason.

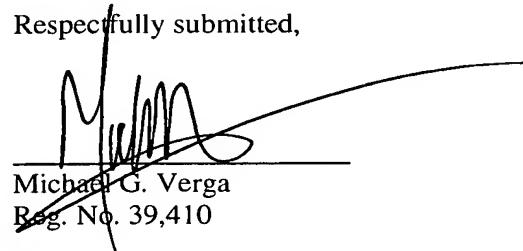
Dependent Claims

29. The dependent claims incorporate all of the subject matter of their respective independent claims and add additional subject matter which makes them *a fortiori* independently patentable over the art of record. Accordingly, Applicants respectfully request that the outstanding rejections of the dependent claims be reconsidered and withdrawn.

Conclusion

30. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

Respectfully submitted,


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